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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,005

02/17/2004

Frank M. Simonutti

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EXAMINER

HUNTER, ALVIN A

ART UNIT

PAPER NUMBER

3711

MAIL DATE

DELIVERY MODE

03/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/780,005	Applicant(s) SIMONUTTI ET AL.	
	Examiner ALVIN A. HUNTER	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,8,10-13,18,19,28-30,32-34,36,37,41,42 and 57-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,8,10-13,18,19,28-30,32-34,36,37,41,42 and 57-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 8, 18, 19, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480).

In regards to claims 1, 2, and 8, Sullivan et al. '561 discloses a golf ball comprising a solid center 10 having a deflection, under an applied static load of 200 lb., of between about 0.100 inches and about 0.140 inches, equivalent to a PGA compression of 60 to 100; at least one intermediate layer 14 comprised of thermoplastic material; and a cover layer 16 comprising an ionomer or ionomer blend and having a Shore D hardness, measured on the curved surface of the golf ball, of greater than about 60 (See Summary of the invention, Column 7, lines 21 through 23; Paragraph bridging columns 10 and 11; and paragraph bridging columns 13 and 14 and Figure 1). Sullivan et al. '561 notes that the intermediate layer may contain an ionomer, but does not disclose the type of ionomer. Statz et al. discloses a thermoplastic composition comprising a co- or ter- polymer of ethylene and acrylic acid wherein 100% of the acid groups are neutralized with metal ions and including a level of magnesium oleate. Statz et al. notes that the composition results in increased resilience. Further, Statz et al.

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notes that the composition can be used in any component of the golf ball. Therefore, one having ordinary skill in the art would have found it obvious to incorporate magnesium oleate to a co- or ter- polymer in which the acid groups are 100% neutralized, as taught by Statz et al., in order to increase the resilience of the golf ball. It is submitted that the being that the combination would result in a golf ball of the same structure as that of the applicant, the initial velocity off the clubhead of greater than about 240 feet- per-second and the COR are inherently met.

In regards to claim 5, Sullivan et al. '516 discloses the at least one intermediate layers having a Shore D hardness as measured on the curved outer surface of the at least one intermediate layer of less than 65.

In regards to claims 18 and 19, Sullivan et al. '561 discloses the mantle 14 comprising density increasing fillers such as tungsten (See Columns 8 and 9).

In regards to claim 57, Statz et al. discloses the amount of cation being of an amount sufficient to neutralize the acid group 100%. Though the values are not explicitly recited, the amount of action has to be of a value such that the neutralization is 100%. One having ordinary skill in the art would have found it obvious to have any amount of cation so long as the composition is 100% neutralized.

Claims 28-30, 32, 41,42, 59, 62-64, 67, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480)and Yamada et al. (USPN 5585440).

In regards to claim 28, 29, 67, and 68, Sullivan et al. '561 discloses a golf ball comprising a solid center 10 having a deflection, under an applied static load of 200 lb.,

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of between about 0.100 inches and about 0.140 inches, equivalent to a PGA compression of 60 to 100; at least one intermediate layer 14 comprised of thermoplastic material; and a cover layer 16 comprising an ionomer or ionomer blend and having a Shore D hardness, measured on the curved surface of the golf ball, of greater than about 60 (See Summary of the invention; Column 7, lines 21 through 23; Paragraph bridging columns 10 and 11; and paragraph bridging columns 13 and 14 and Figure 1). Sullivan et al. '561 notes that the intermediate layer may contain an ionomer, but does not disclose the type of ionomer. Statz et al. discloses a thermoplastic composition comprising a co- or ter- polymer of ethylene and acrylic acid wherein 100% of the acid groups are neutralized with metal ions and including a level of magnesium oleate. Statz et al. notes that the composition results in increased resilience. Further, Statz et al. notes that the composition can be used in any component of the golf ball. Therefore, one having ordinary skill in the art would have found it obvious to incorporate magnesium oleate to a co- or ter- polymer in which the acid groups are 100% neutralized, as taught by Statz et al., in order to increase the resilience of the golf ball. Yamada et al. discloses a rubber composition for use as a golf ball core wherein the composition comprises a high-cis (more than 40%) content polybutadiene rubber wherein the rubber is synthesized with a neodymium catalyst (See Summary of the invention). One having ordinary skill in the art would have found it obvious to have the core comprise of a high-cis polybutadiene catalyzed with neodymium, as taught by Yamada et al., in order to improve the workability, processability, and impact resilience of the golf ball. It is submitted that the being that the combination would result in a golf

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ball of the same structure as that of the applicant, the initial velocity off the clubhead of greater than about 240 feet- per-second and the COR are inherently met.

In regards to claims 30 and 64, Yamada et al. discloses the polybutadiene comprising a high cis-1,4 content polybutadiene and the core further comprising about 5 to about 60 parts by weight of a co-crosslinking agent comprised primarily of a zinc salt of an unsaturated acrylate, about 5 to about 60 parts by weight of a metal oxide activator, and about 0.1 to about 10 parts per hundred resin of a free radical initiator (See Columns 3 through 5).

In regards to claim 32, Statz et al. discloses the thermoplastic material comprising about 8-20% acrylic acid and about 11-23% n-butyl acrylate (See Columns 6 and 7). Typical composition top put at 100%. Being that this is the case and though not explicitly recited by Statz et al., the weight percent of the ethylene component of the material encompasses the range of that claimed by the applicant.

In regards to claims 41 and 42, Sullivan et al. '561 discloses the mantle 14 comprising density increasing fillers such as tungsten (See Columns 8 and 9). Further, Statz et al. notes that density increasing filler such as tungsten can be combined with the composition.

In regards to claim 59, Yamada et al. discloses the polybutadiene comprising a high cis-1,4 content polybutadiene and the core further comprising about 5 to about 60 parts by weight of a co-crosslinking agent comprised primarily of a zinc salt of an unsaturated acrylate, about 5 to about 60 parts by weight of a metal oxide activator, and

about 0.1 to about 10 parts per hundred resin of a free radical initiator (See Columns 3 through 5).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) further in view of Yamagishi et al. (USPN 5779563).

In regards to claim 11, the combination above does not disclose the core, intermediate layer, and cover layer having approximately the same specific gravity. Yamagishi et al. discloses a golf ball having a core 1, intermediate layer 2 and cover 3 having approximately the same specific gravity (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4 lines 28 through 33). One of ordinary skill in the art would have found it obvious to have the core, intermediate layer, and cover layer having approximately the same specific gravity, as taught by Yamagishi et al., in order to improve the golf balls distance, controllability, roll and straight travel. In regards to the solution, it is submitted that the combination would perform such act, being that the limitation requires testing in which the applicant is aware the office has no means of doing.

In regards to claim 12, Yamagishi et al. discloses the specific gravity between the core, intermediate layer, and cover being 1.02 to 1.18, 1.10-1.25, and 0.9 to 1.2, wherein the cover is greater than the core by at least 0.01 (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4, lines 28 through 33).

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Sullivan (USPN 5984806) and Yamada et al. (USPN 5585440) further in view of Yamagishi et al. (USPN 5779563).

In regards to claims 33 and 34, the combination above does not disclose the core, intermediate layer, and cover layer having approximately the same specific gravity. Yamagishi et al. discloses a golf ball having a core 1, intermediate layer 2 and cover 3 having approximately the same specific gravity (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4 lines 28 through 33). For instance, the core has a specific gravity of 1.02 to 1.18, the inner cover has a specific gravity of 0.9 to 1.2, and the outer cover has a specific gravity of 1.10 to 1.25, where in the outer cover has a difference in specific gravity from the core of 0.01 to 0.15. The disclosure of Yamagishi only requires that the outer cover be larger in specific gravity than the core and inner cover and be larger than the specific gravity of the core by a particular amount, therefore specific gravities of the core, inner cover, and outer cover can be 1.12, 1.125, and 1.130, respectively. The specific gravities as noted above would be within the bound of Yamagishi et al. and being that such would be the case, one having ordinary skill in the art would have found it obvious to have the core, intermediate layer, and cover layer having approximately the same specific gravity, as taught by Yamagishi et al., in order to improve the golf ball's distance, controllability, roll and straight travel.

Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) further in view of Caschera, Jr. (Strictly Golf Balls).

Regarding claims 10 and 13, Sullivan et al. in view of Statz et al. does not disclose the diameter of the golf ball being less than 1.680 inches. Caschera et al. discloses the USGA requirement for the diameter to be 1.680 inches and notes that a smaller ball would result in increase distance. With the above being said, one having ordinary skill in the art would have found it obvious to reduce the diameter, as taught by Caschera, Jr., in order to increase distance.

Claim 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamagishi et al. (USPN 558440) further in view of Caschera, Jr. (Strictly Golf Balls).

Regarding claims 36 and 37, Sullivan et al. in view of Statz et al. does not disclose the diameter of the golf ball being less than 1.680 inches. Caschera et al. discloses the USGA requirement for the diameter to be 1.680 inches and notes that a smaller ball would result in increase distance. With the above being said, one having ordinary skill in the art would have found it obvious to reduce the diameter, as taught by Caschera, Jr., in order to increase distance.

Claims 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) further in view of Caschera, Jr. (Strictly Golf Balls).

Regarding claims 60 and 61, Sullivan et al. in view of Statz et al. does not disclose the weight of the golf ball being 47 to 48 grams. Caschera, Jr. discloses the benefits of having a golf ball of particular weight wherein it is noted that the USGA require the golf ball can be no less than 1.62 ounces in which would result in increased

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distance, however it is noted that a smaller ball would result in increased distance (See Page 16). Based on the information above, one having ordinary skill in the art would have found it obvious to increase the weight of the golf ball, as taught by Caschera, Jr., in order to increase the flight distance of the golf ball.

Claims 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamada et al. (USPN 5585440) further in view of Caschera, Jr. (Strictly Golf Ball).

Regarding claims 65 and 66, Sullivan et al. in view of Statz et al. and Yamada et al. does not disclose the weight of the golf ball being 47 to 48 grams. Caschera, Jr. discloses the benefits of having a golf ball of particular weight wherein it is noted that the USGA require the golf ball can be no less than 1.62 ounces in which would result in increased distance, however it is noted that a smaller ball would result in increased distance (See Page 16). Based on the information above, one having ordinary skill in the art would have found it obvious to increase the weight of the golf ball, as taught by Caschera, Jr., in order to increase the flight distance of the golf ball.

Response to Arguments

Applicant's arguments filed 9/10/2007 have been fully considered but they are not persuasive.

Applicant argues the following:

A) Sullivan et al. alone or in combination with Statz et al. does not disclose teach or suggest a golf ball having a cover layer of an ionomer blend having a Shore D

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hardness greater than about 70 and an initial velocity of greater than 240 feet-per-second and the initial velocity is not inherent;

B) Yamada does not teach the Shore D hardness and COR limitation of claim 28;

C) Yamagishi et al. does not teach the layers having approximately the same specific gravity and teaches away; and

D) Caschera, Jr. does not teach a golf ball having a diameter less than 1.680 inches.

The examiner disagrees with the above.

Sullivan et al. discloses the hardness of the outer cover having an open ended range, which implies any hardness greater than 60 would be suitable for the cover layer. Further, the examples show the hardness of the outer cover being Shore D 68, or about 70. The term "about" does not present any novelty to the invention in light of Sullivan et al. Sullivan et al. also notes that the outer cover contributes to the COR of the golf ball (See Paragraph bridging columns 13 and 14). One skilled in the art is also aware that the harder the material the more resilient the material. Therefore, one skilled in the art would expect the resilience to increase with an increase in hardness.

With respect to Statz et al., the applicant is silent to what Statz et al. teaches. This implies that the applicant is in agreement with the teachings of Statz et al. The applicant argues that one Sullivan et al. does not inherently teach the initial velocity, and does not argue the combination of Sullivan and Statz et al. inherently teaching the initial velocity claimed. Statz et al. was combined with Sullivan to teach a modified intermediate layer. The intermediate layer is of the same composition of the

intermediate layer claimed by the applicant. Thus incorporation the intermediate layer into Sullivan et al. would result in further increase of resilience. Being that Sullivan teaches the same composition claimed by the applicant except for the intermediate layer composition and Statz et al. teach the intermediate composition claimed by the applicant, the initial velocity would nature occur and be the same or similar to that of the claimed invention; in other words, the outcome of the combination would have a predictable result. Further, the applicant is aware that the Office does not have the ability to test inventions, which is why the initial velocity is a part of the claim.

With respect to Yamada, see the above regarding Sullivan et al. and Statz et al. Applicant is silent to what Yamada teaches. This is an implication that the Applicant is in agreement with Yamada.

With respect to Yamagishi et al., all of the specific gravity ranges overlap each other. Applicant should also be aware that the claims do not require the cover outer layer to have a specific gravity less than the cover inner layer; therefore, the teaching away argument is moot. Yamagishi et al. discloses the specific gravity between the core, intermediate layer, and cover being 1.02 to 1.18, 1.10-1.25, and 0.9 to 1.2 respectively and even notes the difference between the core and outer cover. Theoretically, a cover, intermediate layer, and core having approximately the same specific gravities would yield the results disclosed by Yamagishi et al. Applicant clearly discloses that a balanced ball would not deviate from the intended flight and roll path, and Yamagishi discloses the specific gravity ranges clearly being important in order to

have the ball travel a straighter path and long distance. These results would be expected.

With respect to Caschera, Jr., it notes the reason why one would have the diameter smaller than that required by the USGA. Having a smaller weight and diameter increases the flight distances and allows the golf ball to become airborne easier. This is motivation according to the MPEP. Further, Sullivan et al. does hold the invention to only meeting USGA requirements. Sullivan et al. uses the language "generally" when referring to the diameter and weight. Thus, Caschera, Jr. would suggest a reason as to why a smaller diameter and weight would be desirable.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN A. HUNTER whose telephone number is

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(571)272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim, can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alvin A Hunter/

Primary Examiner, Art Unit 3711

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